

Amendments to and Listing of the Claims:

Please cancel claim 7 and amend claim 1 so that the claims now read as follows:

1. (Currently Amended) A cutting or grinding oil composition for a minimal quantity lubrication system comprising 20 to 100 percent by mass of an ester, 0 to 50 percent by mass of an oiliness improver, 0 to 10 percent by mass of an oxidation inhibitor, and 0 to 70 percent by mass of a base oil based on a total mass of the composition, wherein the composition has a kinematic viscosity of 1 to 100 mm²/s at 40 °C, and wherein said ester comprises a polyhydric alcohol selected from the group consisting of those of from dihydric- to decahydric-alcohols and a fatty acid having 2 to 24 carbon atoms.

2. (Original) The oil composition according to claim 1 wherein said ester has an iodine value of 0 to 80.

3. (Original) The oil composition according to claim 1 wherein said ester has a bromine value of 0 to 50 gBr₂/100g.

4. (Original) The oil composition according to claim 1 wherein said ester has a hydroxyl value of 0.01 to 300 mgKOH/g.

5. (Original) The oil composition according to claim 1 wherein said ester has a saponification value of 100 to 500 mgKOH/g.

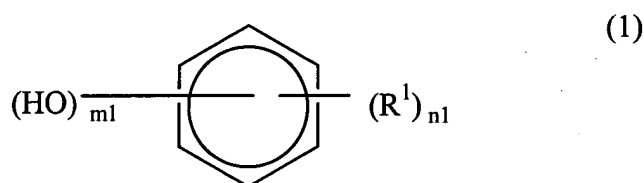
6. (Original) The oil composition according to claim 1 wherein said ester is a synthetic ester.

7. (Cancelled).

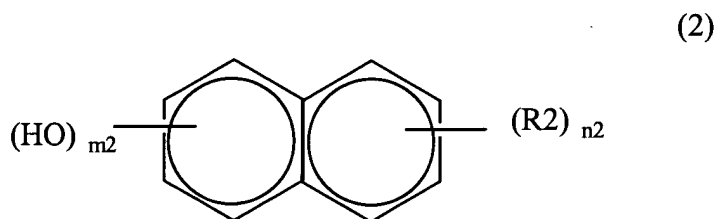
8. (Cancelled).

9. (Cancelled).

10. (Previously Presented) The oil composition according to claim 1, wherein said oiliness improver is selected from the group consisting of (A) alcohols, (B) carboxylic acids, (C) sulfides of unsaturated carboxylic acids, (D) compounds represented by formula (1) given below, (E) compounds represented by formula (2) given below, (F) polyoxyalkylene compounds, and (G) esters; said formula (1) being represented by the formula



wherein R^1 is a hydrocarbon group having 1 to 30 carbon atoms, $m1$ is an integer from 1 to 6, and $n1$ is an integer from 0 to 5; and said formula (2) being represented by the formula



wherein R^2 is a hydrocarbon group having 1 to 30 carbon atoms, $m2$ is an integer from 1 to 6, and $n2$ is an integer from 0 to 5.

11. (Previously Presented) The oil composition according to claim 1, wherein said oiliness improver is contained in an amount of 0.1 to 50 percent by mass, based on the total mass of the composition.

12. (Cancelled).

13. (Previously Presented) The oil composition according to claim 1, wherein said oxidation inhibitor is one or more compounds selected from the group consisting of L-ascorbic acid (vitamin C), fatty acid ester of L-ascorbic acid, tocopherol (vitamin E), 2,6-di-tert-butyl-p-cresol (DBPC), and 3,5-di-tert-butyl-4-hydroxyanisole, 2-tert-butyl-4-hydroxyanisole, 3-tert-butyl-4-hydroxyanisole, 1,2-dihydro-6-ethoxy-2,2,4-trimethylquinoline (ethoxyquin), 2-(1,1-dimethyl)-1,4-benzenediol (TBHQ), and 2,4,5-trihydroxybutyrophenone (THBP).

14. (Previously Presented) The oil composition according to claim 1, wherein said oxidation inhibitor is one or more compounds selected from the group consisting of L-ascorbic acid (vitamin C), fatty acid ester of L-ascorbic acid, tocopherol (vitamin E), 2,6-di-tert-butyl-p-cresol (DBPC), and 3,5-di-tert-butyl-4-hydroxyanisole.

15. (Previously Presented) The oil composition according to claim 1, wherein said oxidation inhibitor is contained in an amount of 0.1 to 10 percent by mass, based on the total mass of the composition.

16. (Cancelled).

17. (Previously Presented) A minimal quantity lubrication system for cutting or grinding which comprises supplying together with a compressed fluid an oil composition in a quantity of 0.001 ml/minute to 1 ml/minute to the cutting or grinding spot of a work, wherein the oil composition comprises 20 to 100 percent by mass of an ester, 0 to 50 percent by mass of an oiliness improver, 0 to 10 percent by mass of an oxidation inhibitor, and 0 to 70 percent by mass of a base oil based on a total mass of the composition, and the composition has a kinematic viscosity of 1 to 100 mm²/s at 40 °C.

18. (Previously Presented) The cutting or grinding oil composition according to claim 1, wherein said ester is contained in an amount of at least 30 percent by mass based on the total mass of the composition.

19. (Previously Presented) The cutting or grinding oil composition according to claim 1, wherein said ester is contained in an amount of at least 50 percent by mass based on the total mass of the composition.

20. (Previously Presented) A method for cutting or grinding a work which comprises:

- (a) cutting or grinding a work such that the work has a cutting or grinding spot; and
- (b) supplying to the cutting or grinding spot of the work an oil composition from a minimal quantity lubrication system wherein the minimal quantity lubrication system comprises supplying together with a compressed fluid the oil composition in a quantity of 0.001 ml/minute to 1 ml/minute; wherein the oil composition comprises 20 to 100 percent by mass of an ester, 0 to 50 percent by mass of an oiliness improver, 0 to 10 percent by mass of an oxidation inhibitor, and 0 to 70 percent by mass of a base oil based on a total mass of the composition, and wherein the composition has a kinematic viscosity of 1 to 100 mm²/s at 40 °C.

21. (Previously Presented) The cutting or grinding oil composition according to claim 1, wherein said ester is an ester of a polyhydric alcohol and a monobasic acid, and said polyhydric alcohol is a dihydric to decahydric alcohol selected from the group consisting of ethylene glycol, diethylene glycol, propylene glycol, dipropylene glycol, 1,3-propane diol, 1,2-propane diol, 1,3-butane diol, 1,4-butane diol, 2-methyl-1,2-propane diol, 2-methyl-1,3-propane diol, 1,2-pentane diol, 1,3-pentane diol, 1,4-pentane diol, 1,5-pentane diol, neopentyl glycol, glycerin, polyglycerin, trimethylolalkane and dimers through tetramers thereof, pentaerythritol and dimers through tetramers thereof, 1,2,4-butane triol, 1,3,5-pentane triol, 1,2,6-hexane triol, 1,2,3,4-butanetetrol, sorbitol, sorbitan, sorbitol glycerin condensation products, adonitol, arabitol, xylitol, mannitol, and saccharides.

22. (Previously Presented) The cutting or grinding oil composition according to claim 1, wherein said ester is an ester of polyhydric alcohol and a monobasic acid, and said polyhydric alcohol is a dihydric to hexahydric alcohol selected from the group consisting of ethylene glycol, diethylene glycol, propylene glycol, dipropylene glycol, 1,3-propane diol, 2-methyl-1,2-propane diol, 2-methyl-1,3-propane diol, neopentyl glycol, glycerin, diglycerin, triglycerin, trimethylolalkane and dimers through tetramers thereof, pentaerythritol, dipentaerythritol, 1,2,4-butane triol, 1,3,5-pentane triol, 1,2,6-hexane triol, 1,2,3,4-butane tetrol, sorbitol, sorbitan, sorbitol glycerin condensation products, adonitol, arabitol, xylytol and mannitol.

23. (Previously Presented) The cutting or grinding oil composition according to claim 1, wherein said ester is an ester of a polyhydric alcohol and a monobasic acid, and said polyhydric alcohol is a dihydric to hexahydric alcohol selected from the group consisting of ethylene glycol, propylene glycol, neopentyl glycol, glycerin, trimethylol ethane, trimethylol propane, pentaerythritol and sorbitan.

24. (Previously Presented) The cutting or grinding oil composition according to claim 1, further comprising at least one additive selected from the group consisting of an extreme pressure additive, a moisture control additive, a film forming agent, a water substituting agent, a corrosion inhibitor, a metal deactivator, an antifoamer, and an ashless dispersant.